



TMH:jlb 5/30/01 4239-58054 53417

Attorney Reference Number 4239-58054

PATENT #9

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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MAY 14 2002

TECH CENTER 1600/2900

Re application of: Kovacs *et al.*

Art Unit: 1645

Application No. 09/762,724

CERTIFICATE OF MAILING

Filed: February 9, 2001

For: IDENTIFICATION OF A REGION OF THE
MAJOR SURFACE GLYCOPROTEIN (MSG)
GENE OF HUMAN PNEUMOCYSTIS
CARINII

I hereby certify that this paper and the documents referred to as
being attached or enclosed herewith are being deposited with
the United States Postal Service on May 30, 2001, as First
Class Mail in an envelope addressed to: OFFICE OF INITIAL
PATENT EXAMINATION, CUSTOMER SERVICE
CENTER, COMMISSIONER FOR PATENTS,
WASHINGTON D.C. 20231.

Examiner: Not yet assigned

Date: May 30, 2001

Tanya M. Harding, Ph.D.
Attorney for Applicant

TRANSMITTAL LETTER

OFFICE OF INITIAL PATENT EXAMINATION
CUSTOMER SERVICE CENTER
COMMISSIONER FOR PATENTS
WASHINGTON, DC 20231

Enclosed for filing in the application referenced above are the following:

- ☒ Request for Correction of Official Filing Receipt
- ☒ Exhibit A
- ☒ The Director is hereby authorized to charge any fees that may be required to Account No. 02-4550. A copy of this sheet is enclosed.
- ☒ Please return the enclosed postcard to confirm that the items listed above have been received.

Respectfully submitted,

KLARQUIST SPARKMAN CAMPBELL
LEIGH & WHINSTON, LLP

By

Tanya M. Harding, Ph.D.
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cc: Docketing

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TMH:jib 05/30/01 4239-58054 53413

MAY 14 2001
PATENT
Attorney Reference No. 4239-58054
TECH CENTER 1600/2900



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

For Patent Application of: Kovacs *et al.*,

Application No. 09/762,724

Filed: February 9, 2001

For: IDENTIFICATION OF A REGION OF
THE MAJOR SURFACE GLYCOPROTEIN
(MSG) GENE OF HUMAN PNEUMOCYSTIS
CARINII

Art Unit: 1645

Examiner: Not yet assigned

Date: May 30, 2001

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper or fee referred to as being attached or enclosed) is being deposited with the United States Postal Service on 5/30/2001 as First Class Mail in an envelope addressed to: Office of Initial Patent Examination Customer Service Center, COMMISSIONER FOR PATENTS, Washington, DC 20231.

Tanya M. Harding, Ph.D.
Attorney for Applicant(s)

REQUEST FOR CORRECTED OFFICIAL FILING RECEIPT

Office of Initial Patent Examination
Customer Service Center
COMMISSIONER FOR PATENTS
Washington, DC 20231

Sir:

Applicants have received the official Filing Receipt for the application referenced above, a copy of which (with requested correction shown in red ink) is attached as Exhibit A.

The following errors appears on the Filing Receipt:

- 1) Inventor Gill's name is incorrectly identified as "Vee J. ` Gill". Please correct to read --Vee J. Gill--.
- 2) The title of the application has a typographical error. Please correct the title of the application to read --Identification of a region of the major surface glycoprotein (msg) gene of human pneumocystis carinii--.

This request is being submitted within ten days of receipt of the official Filing Receipt by the undersigned attorney.

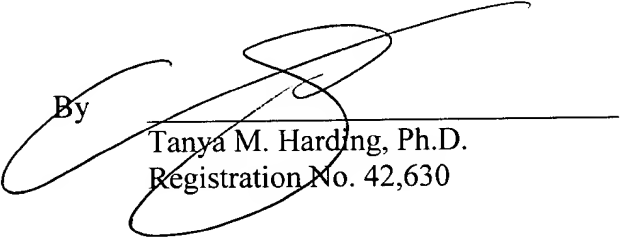
Applicants request that the identified errors be corrected and that a new official Filing Receipt be issued.

Please call the undersigned if any further information is required.

Respectfully submitted,

KLARQUIST SPARKMAN CAMPBELL
LEIGH & WHINSTON, LLP

By



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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/762,724	02/09/2001	1645	1620	4239-58054		45	9

CONFIRMATION NO. 7526

24197
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121 SW SALMON STREET
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FILING RECEIPT



OC000000006068133

Date Mailed: 05/11/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Joseph A. Kovacs, Potomac, MD;
Shengning Huang, N. Potomac, MD;
Henry Masur, Bethesda, MD;
Steven H. Fischer, Rockville, MD;
~~Vee J. Gill~~, Potomac, MD;
Qin Mei, North Wales, PA;

Vee J. Gill

Domestic Priority data as claimed by applicant

THIS APPLICATION IS A 371 OF PCT/US99/18750 08/17/1999
WHICH CLAIMS BENEFIT OF 60/096,805 08/17/1998

Foreign Applications

Projected Publication Date: N/A

Non-Publication Request: No

Early Publication Request: No

EXHIBIT

A

Title

Identification of a region of the major surface glycoprotein (msg) gene of human
~~pneumocystiscarinii~~

Preliminary Class

435

*pneumocystis
carinii*

Data entry by : NGUYEN, SON

Team : OIPE

Date: 05/11/2001



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Title 37, Code of Federal Regulations, 5.11 & 5.15

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PLEASE NOTE the following information about the Filing Receipt:

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 500 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:

Assistant Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
Washington, DC 20231

(57) Abstract

Particularly sensitive techniques for the detection of *P. carinii* in clinical samples are disclosed. These techniques relate to the PCR amplification and/or detection of human-*P. carinii* major surface glycoprotein (MSG) gene sequences. Also disclosed are seven novel genes encoding human-*P. carinii* MSG, and the proteins encoded for by these genes. These genes provide proof that human-*P. carinii* MSG is encoded for by a highly conserved gene family, and that the corresponding proteins have a very highly conserved region of about 100 amino acids near their C-terminal end. This highly conserved carboxy-terminal region has a significantly different sequence than that found in rat-derived MSG.